What is claimed is:

1. A system for positioning an eye of a patient for laser surgery which comprises:

a surgical laser unit for generating a laser beam;

an eye stabilizing element formed with a receptacle;

a means for holding said eye stabilizing element in contact with the anterior surface of the cornea of the eye to project said receptacle outwardly therefrom;

an alignment device, mounted on said surgical laser unit, wherein said alignment device is formed with a tip, and further wherein said tip is dimensioned for mating engagement with said receptacle of said eye stabilizing element; and,

a means for moving the patient and said eye stabilizing element into engagement with said alignment device, for positioning the eye of the patient at a predetermined location relative to said surgical laser unit for laser surgery.

2. A system as recited in claim 1 wherein the receptacle of said eye stabilizing element is tapered, and further wherein the tip of said alignment device is tapered and dimensioned for precisely engaging with the tapered receptacle of said eye stabilizing element.

3. A system as recited in claim 1 which further comprises:

at least one pressure sensor, mounted on said surgical laser unit, for measuring interactive forces between said alignment device and said eye stabilizing element; and,

a means for determining pressures exerted on the eye using said measured interactive forces.

4. A system as recited in claim 1 which further comprises a plurality of light sources for illuminating the eye, wherein said light sources create an observable pattern of reflected light, and further wherein said observable pattern of reflected light can be compared to a predetermined pattern of light for verifying the positioning of the eye.

5. A system as recited in claim 1 wherein said moving means is a chair having a motorized control assembly for reconfiguring and moving said chair.

6. A system as recited in claim 1 wherein said eye stabilizing element is formed with a primary vacuum fitting, and further wherein the holding means of the system comprises:

a primary vacuum line connected to said primary vacuum fitting; and

a primary vacuum pump in fluid communication with said primary vacuum line.

7. A system as recited in claim 6 which further comprises a means for maintaining the engagement between said alignment device and said eye stabilizing element.

8. A system as recited in claim 7 wherein the alignment device has a secondary vacuum fitting, and wherein said maintaining means comprises:

a secondary vacuum line attached to said secondary vacuum fitting;

a secondary vacuum pump in fluid communication with said secondary vacuum line; and,

a means for controlling a suction force induced by said vacuum pump, for maintaining a proper engagement between said eye stabilizing element and said alignment device.

9. A system as recited in claim 3 wherein said alignment device further comprises a mounting ring having a center point, and further wherein a first pressure sensor, a second pressure sensor, and a third pressure sensor are mounted on said surgical laser unit equidistant from said center point of said mounting ring, and equidistant from each other.

10. A method for positioning an eye of a patient for laser surgery which comprises the steps of:

holding an eye stabilizing element in contact with the anterior surface of the eye, said eye stabilizing element being formed with a receptacle, with said receptacle extending outwardly from the eye when said eye stabilizing element is held thereon;

mounting an alignment device on a surgical laser unit, wherein said alignment device is formed with a tip, said tip being dimensioned for mating engagement with said receptacle of said eye stabilizing element; and,

moving said eye stabilizing element into engagement with said alignment device to position the eye of the patient at a predetermined location relative to said surgical laser unit for laser surgery.

11. A method as recited in claim 10 which further comprises the steps of:

monitoring at least one pressure sensor mounted on said surgical laser unit, wherein said pressure sensor measures the interactive forces between said alignment device and said eye stabilizing element; and,

determining pressures exerted on the eye using said measured interactive forces.

12. A method as recited in claim 10 which further comprises the steps of:

illuminating the eye with a plurality of light sources;

observing a pattern of reflected light; and,

comparing said pattern of reflected light to a predetermined pattern of light for verifying the positioning of the eye.

13. A method as recited in claim 10 wherein said holding step includes activating a primary vacuum pump to evacuate a vacuum channel formed in said eye stabilizing element, wherein the evacuation of said vacuum channel creates a suction force between said eye stabilizing element and the eye.

14. A method as recited in claim 10 wherein said moving step includes activating a motorized control assembly mounted in a chair, to move and reconfigure said chair.

15. A method as recited in claim 11 wherein said alignment device further comprises a mounting ring having a center point, and further wherein a first pressure sensor, a second pressure sensor, and a third pressure sensor are mounted on said surgical laser unit equidistant from said center point of said mounting ring, and equidistant from each other.

16. An apparatus for positioning an eye of a patient for laser surgery which comprises:

a means for moving the patient for engaging an alignment device with an eye stabilizing element, wherein said alignment device is positioned on a stationary surgical laser unit, and further wherein said alignment device is formed with a tip for mating engagement with a receptacle of said eye stabilizing element;

a means for holding said eye stabilizing element, formed with a receptacle, in contact with the anterior surface of the cornea of the eye, with the receptacle extending outwardly therefrom;

a means for verifying the engagement of said eye stabilizing element with said alignment device; and,

a means for determining pressures exerted on the eye when said eye stabilizing element is engaged with said alignment device.

17. An apparatus as recited in claim 16 wherein said moving means comprises a chair having a motorized control assembly for reconfiguring and moving said chair.

18. An apparatus as recited in claim 16 wherein said eye stabilizing element is formed with a primary vacuum fitting, and further wherein the apparatus comprises a primary vacuum line connected to said primary vacuum fitting, and a primary vacuum pump in fluid communication with said primary vacuum line.

19. An apparatus as recited in claim 16 wherein said verifying means comprises:

a plurality of light sources for illuminating the eye, wherein said light sources create an observable pattern of reflected light; and,

a means for comparing said observable pattern of reflected light to a predetermined pattern of light, for verifying the engagement of said eye stabilizing element with said alignment device.

20. An apparatus as recited in claim 18 wherein said determining means further comprises:

at least one pressure sensor mounted on said surgical laser unit for measuring interactive forces between said alignment device and said eye stabilizing element; and,

a means for determining the pressures exerted on the eye using said measured interactive forces.